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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,258	01/23/2002	Sarah Barber	01CR048/KE	6742

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EXAMINER
CHUONG, TRUC T

ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/055,258	BARBER ET AL.
	Examiner	Art Unit
	Truc T. Chuong	2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2005*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This communication is responsive to Amendment, filed 10/17/05.

Claims 1-14 are pending in this application. Claims 1, 5, and 8 are independent claims.

This action is made final.

The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior office action.

Claim Rejections - 35 USC § 102

1.   Claims 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Briffe et al. (U.S.

Patent No. 6,112,141).

As to claim 8, Briffe teaches an avionics system having displays with display

configurations pilot-selected for a phase of flight of an aircraft and reconfigurable for each phase

of flight comprising:

a flight display for storing and displaying stored phase of flight display configurations for

each phase of flight of the aircraft (the fight plan can be stored in the memory and displayed on

the display screen, e.g., col. 3 lines 10-30, and col. 7 lines 58-67, and fig. 21); and

a cursor control panel (e.g., col. 11 lines 56-60, and col. 12 lines 5-43) connected to the

flight display for changing from one stored phase of flight display configuration to another stored

phase of flight display configuration when selected by the pilot for a phase of flight and for

reconfiguring the display configuration for each phase of flight (the existing flight plan displayed

on the screen can be modified by the crew with new parameters, e.g., col. 39 lines 30-63).

As to claim 9, Briffe teaches the avionics system of claim 8 wherein the flight display

further comprises:

a middle window for displaying a pilot-selectable display configuration; a lower window

for displaying a pilot-selectable display configuration; and line select keys for selecting the

middle window and lower window display configuration (e.g., col. 31 lines 10-55, and fig. 21).

Claim Rejections - 35 USC § 103

2.   Claims 1-7, 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briffe

et al. (U.S. Patent No. 6,112,141) in view of D'Hooge et al. (U.S. Patent No. 6,636,354 B1).

As to clam 10, Briffe teaches the avionics system of claim 9 wherein the cursor control

panel further comprises phase of flight quick access pushbuttons for selecting a stored phase of

flight configuration and for reconfiguring a stored phase of flight configuration into a new phase

of flight configuration by selecting the new configuration with controls on the cursor control

panel and pressing a phase of flight quick access pushbutton for storing the new configuration

(pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26 line 66-col. 27

line 16 and fig. 20); however, Briffe does not teach of pressing the pushbutton for a

predetermined time to store a new setup. D'Hooge clearly shows that the user may press and

hold the switch button for an extended period of time to indicate that the feature is desired (e.g.,

col. 9 line 66-col. 10 line 3). It would have been obvious at the time of the invention, a person

with ordinary skill in the art would want to have the pressing button for a period of time of

D'Hooge in the Flight Management System of Briffe to ease the user to distinguish between a

normal or a desired selection which the user really wants to operate.

As to claim 11, the modified Briffe teaches the avionics system of claim 10 wherein the cursor control panel further comprises:

although, Briffe teaches a climb quick access pushbutton (518) and soft buttons (the soft buttons for setting CLIMB, DESC, and cruise speed, e.g., col. 28 lines 35-57, col. 32 line 10 and lines 50-59) for selecting a climb phase of flight display configuration and for reconfiguring the climb phase of flight display configuration, selecting a cruise phase of flight display configuration and for reconfiguring the cruise phrase of flight display configuration, and selecting a descend phase of flight display configuration and for reconfiguring the descend phase of flight display configuration (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26 line 66-col. 27 line 16 and fig. 20); Briffe does not show that there are three separate pushbuttons for climbing, cruising, and descending as claimed. It would have been obvious at the time of the invention, a person with ordinary skill in the art would modify the Flight Management System of Briffe in view of D'Hooge with the separate pushbuttons to provide convenience and improve visibility for the flight crew.

As to claims 7, and 12-14, the modified Briffe in view of D'Hooge teaches the method of claim 11 wherein each of the steps of selecting the climb phase of flight configuration, the cruise phase of flight configuration, and descend phase of flight configuration are selected (e.g., col. 24 lines 27-34, col. 26 line 66-col. 27 line 16, and col. 28 lines 35-57, col. 32 line 10 and lines 50-59); and Briffe also show a middle window display configuration from the group consisting of a checklist index, a flight management system text, and a vertical terrain profile and a lower window display configuration from the group consisting of a present position, plan, datalink, charts, traffic, and maintenance formats (Briffe clearly teaches the in fig. 21 that the middle

window 556 shows the checklist such as NORM, WET, DRY, etc. and the lower window 552

shows position at 18000 FT).

As to claim 1, the modified Briffe in view of D'Hooge teaches a method of selecting,

displaying, and reconfiguring display configurations on an avionics display in an avionics system

on an aircraft for different phases of flight of the aircraft comprising the steps of:

selecting a prestored climb display configuration for display on the avionics display with

a climb quick access pushbutton on a cursor control panel when the aircraft is in a climb phase of

flight (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26 line 66-col.

27 line 16 and fig. 20, the soft buttons for setting CLIMB, DESC, and cruise speed, e.g., col. 28

lines 35-57, col. 32 line 10 and lines 50-59, and see rejection of claim 11 above);

reconfiguring the prestored climb display configuration into a new climb display

configuration with controls on the cursor control panel and on the avionics display (e.g., col. 10

lines 3-53);

selecting a prestored cruise display configuration for display on the avionics display with

a cruise quick access pushbutton on the cursor control panel when the aircraft changes to a cruise

phase of flight (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26

line 66-col. 27 line 16 and fig. 20, the soft buttons for setting CLIMB, DESC, and cruise speed,

e.g., col. 28 lines 35-57, col. 32 line 10 and lines 50-59, and see rejection of claim 11 above); and

selecting a prestored descend display configuration for display on the avionics display

with a descend quick access pushbutton on the cursor control panel when the aircraft changes to

a descend phase of flight (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34,

col. 26 line 66-col. 27 line 16 and fig. 20, the soft buttons for setting CLIMB, DESC, and cruise

speed, e.g., col. 28 lines 35-57, col. 32 line 10 and lines 50-59, and see rejection of claim 11 above);

although, Briffe teaches pressing the climb quick access pushbutton for storing the new configuration (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26 line 66-col. 27 line 16 and fig. 20); Briffe does not teach of pressing the pushbutton for a predetermined time to store a new setup. D'Hooge clearly shows that the user may press and hold the switch button for an extended period of time to indicate that the feature is desired (e.g., col. 9 line 66-col. 10 line 3). It would have been obvious at the time of the invention, a person with ordinary skill in the art would want to have the pressing button for a period of time of D'Hooge in the Flight Management System of Briffe to ease the user to distinguish between a normal or a desired selection which the user really wants to operate.

As to claim 2, Briffe teaches the method of claim 1 further comprising the steps of:

reconfiguring the prestored cruise display configuration into a new cruise display configuration with controls on the cursor control panel and the avionics display (setting the cruise speed, e.g., col. 28 lines 35-57, col. 32 lines 10-59); and

pressing the cruise quick access pushbutton for a period of time to store the new cruise display configuration (e.g., col. 32 lines 10-59).

As to claim 3, Briffe in view of D'Hooge teaches the method of claim 1 further comprising the steps of:

reconfiguring the prestored descend display configuration into a new descend display configuration with controls on the cursor control panel and the avionics display (pushbutton 518 for changing the ALT setting, e.g., col. 24 lines 27-34, col. 26 line 66-col. 27 line 16 and fig. 20,

the soft buttons for setting CLIMB, DESC, and cruise speed, e.g., col. 28 lines 35-57, col. 32 line 10-59); and

pressing the descend quick access pushbutton for a period of time to store the new descend display configuration (e.g., col. 24 lines 27-34, col. 26 line 66-col. 27 line 16 and fig. 20, the soft buttons for setting CLIMB, DESC, and cruise speed, e.g., col. 28 lines 35-57, col. 32 line 10-59).

As to claim 4, the modified Briffe teaches the method of claim 1 further comprising the steps of selecting the new climb display configuration on the avionics display with the climb quick access pushbutton on the cursor control panel (e.g., col. 11 lines 56-60, col. 12 lines 5-43, and e.g., col. 39 lines 30-63).

As to claim 5, Briffe in view of D'Hooge teaches a method of selecting, displaying, and reconfiguring display configurations on an avionics display in an avionics system on an aircraft for different phases of flight of the aircraft comprising the steps of:

selecting prestored display configurations for display on the avionics display with quick access pushbuttons on a cursor control panel in accordance with the aircraft phase of flight (the fight plan can be stored in the memory and displayed on the display screen, e.g., col. 3 lines 10-30, and col. 7 lines 58-67, and fig. 21);

reconfiguring the prestored display configurations into new display configurations with controls on the cursor control panel and the avionics display (the existing flight plan displayed on the screen can be modified by the crew with new parameters, e.g., col. 39 lines 30-63); and

pressing the quick access pushbutton for a period of time to store the new display configuration (note the rejection of claim 10 above).

As to claim 6, this is the equivalent to claim 11 above; therefore, rejected under a similar

rationale.

Response to Arguments

3.   Applicant's arguments filed 10/17/05 have been fully considered but they are not

persuasive.

Applicant has argued and Examiner disagrees with the following reasons:

The aircraft control display with its control flight plan values of Briffe are preset

and cannot be changed or reconfigured.

Briffe clearly teaches that the pilot always has the ability to force the use of

values he wants (e.g., col. 31 lines 14-15). The values are Altitude, Slope, Speed,

etc. (e.g., col. 42 lines 16-47), which can be changed/reconfigured to overwrite

the preset flight plan values (e.g., col. 31 lines 10-55), and the new flight

values/parameters can be stored as a new flight plan (e.g., col. 32 lines 29-67, and

col. 33 lines 1-15, lines 34-38). In addition, the pilot can directly display the

results of the modifications and, if so desired, may activate the flight plan with

new parameters, or recalling the existing flight plan (or autopilot) (col. 29 lines

39-51, and col. 42 lines 42-57). Therefore, the system permits the pilot to enter

data commanding the changes in aircraft status such as a command climb,

descend, ascend, cruise speed, vertical speed, etc., and the exiting flight plan

displayed on the screen can be modified by the crew with new flight

values/parameters is similar to reconfigure the existing values as claimed by the

Applicant.

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Truc T. Chuong whose telephone number is 571-272-4134. The

examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

01/22/06

WEILUN LO
SUPERVISORY PATENT EXAMINER